

## ERS-7M2

Entertainment Robot AIBO

for AIBO MIND 2

## \* User's Guide (PC·Network)

When printing this document to legal size paper, place a check mark beside the "Auto-rotate and center pages" option of the Print dialog box. This prints the document on the center of the page.



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"OPEN-R" is the standard interface for the AIBO Entertainment Robot system that Sony is actively promoting. This interface expands the capability of the entertainment robot through a flexible combination of hardware and interchangeable software to suit various applications.

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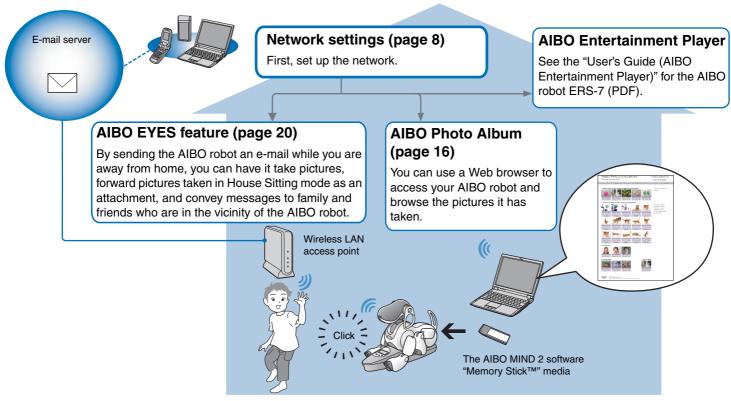
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Other information about the AIBO robot is available on the Internet at the following site: http://www.aibo.com

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## Welcome to AIBO<sup>®</sup> Entertainment Robot ERS-7 PC network

Using the wireless LAN functionality of the AIBO Entertainment Robot ERS-7, you can view pictures taken by your AIBO robot in the AIBO Photo Album, in real-time. You can also use your mobile communication device\* (with Internet connectivity) or a standard connection to the Internet to play with the AIBO EYES feature. With AIBO Entertainment Player software, you can control your AIBO robot remotely and use it to enjoy music, etc.



<sup>\*</sup> Your mobile communication device must have JPEG e-mail viewing capability.

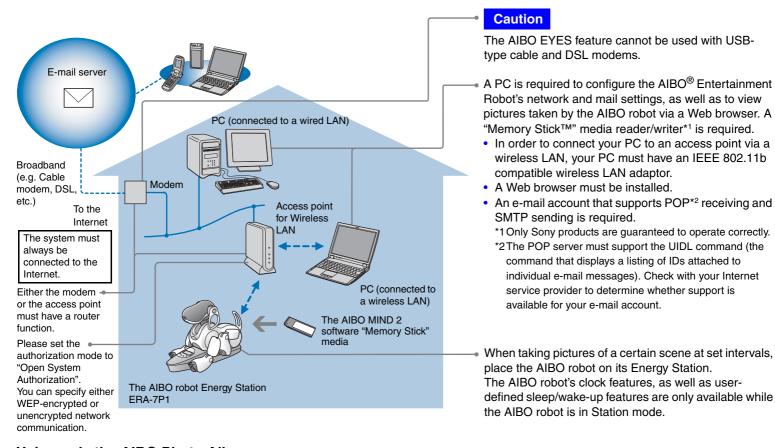
## Network Configuration

In this section, we will confirm the system environment and set it up to use the AIBO<sup>®</sup> Entertainment Robot's wireless LAN connection.



## **Confirming system requirements**

To use the AIBO EYES feature, your system must meet the following requirements.



## Using only the AIBO Photo Album

- An e-mail account and continuous Internet connection are not needed.
- A PC that supports a wireless LAN can be used in place of a wireless LAN access point.

## **Enabling the Wireless LAN function**

In order to enable the AIBO® Entertainment Robot's wireless LAN function, turn the wireless switch on its body to ON.

If the AIBO robot is still operating, first press the pause button to put the AIBO robot in Pause mode.

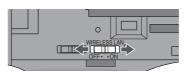
**1** Hold the AIBO robot firmly, turn it upside down, and open the cover.



#### Caution

- When lifting the AIBO robot, always hold it by its body, and not its extremities. (Those with small hands may have difficulty handling the AIBO robot.)
- Do not touch the charging terminal on the AIBO robot's stomach with your bare hands. Touching the contacts will reduce contact quality.

**2** Slide the wireless switch to ON, and close the cover.



#### **Caution**

Simply turning ON the switch will not make the wireless LAN function usable. Refer to the next page for instructions on how to set up the network.

## AIBO® Entertainment Robot's network setup

This section will guide you through the setup needed to enable your AIBO robot's wireless LAN function. A "Memory Stick<sup>TM</sup>" media reader/writer\* is required to set up the network.

\* Only Sony products are guaranteed to operate correctly.

## **Network setup procedure**

Which OS are you running?

If you are using the Microsoft<sup>®</sup> Windows<sup>®\*1</sup> 98 SE, Windows Me, Windows 2000, or Windows XP (Home Edition or Professional) operating system.

Using the "AIBO WLAN Manager 2"\*2 on the CD-ROM included with the AIBO Entertainment Robot ERS-7, you can configure the AIBO MIND 2 software "Memory Stick" media to match your network device



Refer to the next page for setup instructions.

For other operating systems (Windows 98, Mac OS®, etc.), you can change the AIBO MIND 2 software "Memory Stick" media settings directly to match your network configuration.



For details, refer to "Editing "WLANCONF.TXT" manually" on page 52.

<sup>\*1</sup>Hereafter shortened to "Windows".

<sup>\*2&</sup>quot;AIBO WLAN Manager 2" is a utility program used to configure the wireless LAN connection settings on the AIBO robot. "AIBO WLAN Manager 2" runs under the Windows 98 SE, Windows 2000, Windows Me, and Windows XP (Home Edition/Professional) operating systems.

## Installing the "AIBO WLAN Manager 2"

Install the "AIBO WLAN Manager 2" on your PC.

## Insert the CD-ROM included with the AIBO® Entertainment Robot ERS-7 into your CD-ROM drive.

The installer will automatically start.

If the installer does not start, double-click the "Setup.exe" file in the CD.

Follow the on-screen instructions to install the software.

## Windows<sup>®</sup> XP users must install Universal Plug and Play (If you are not using Windows XP, the following procedure is unnecessary.)

Windows XP operating system users must install Universal Plug and Play in order to use the AIBO robot's search function. Use the following procedure to install Universal Plug and Play.

- ① Click "Start"→ "Control Panel".
- ② Select "Add/Remove Programs" → "Add/Remove Windows Components".
- 3 In the "Components" list, select the "Network Services" check box, and then click "Details".
- Select the "Universal Plug and Play" check box, and then click "OK".
  If you used a CD to install the Windows operating system, you will be prompted to insert it into your computer.
- 5 Click "Next" to start installation.
- When the "Completed the Windows Components Wizard" screen appears, click "Finish". Installation of Universal Plug and Play is now complete.
- ① Close the "Add/Remove Programs" window.
- (8) Close the "Control Panel" window.

#### Caution

If you are using Windows<sup>®</sup> XP SP2 (Service Pack2) and Windows Firewall is set to block the UPnP Framework service, the AIBO search function will not be able to detect the AIBO robot. Follow the steps below to add the UPnP Framework to the list of unblocked services.

- ①Click "Start" → "Control Panel".
- 2 Double-click "Windows Firewall".
- 3Click the "Exceptions" tab on the "Windows Firewall" window.
- (4) Place a check mark by "UPnP Framework" in the "Programs and Services" list, and click "OK".
- **5**Close the "Control Panel" window.

## **Configuring network settings with** the "AIBO WLAN Manager 2"

Using the "AIBO WLAN Manager 2", you can configure the AIBO MIND 2 software "Memory Stick<sup>TM</sup>" media to match your network device settings.

If using the Windows XP operating system, click "Start" → "All Programs" → "AIBO WLAN Manager 2" → "AIBO WLAN Manager 2".

If using an operating system other than Windows XP, click "Start" → "Programs" → "AIBO WLAN Manager 2" → "AIBO WLAN Manager 2".

The "AIBO WLAN Manager 2" starts, and the "AIBO WLAN Manager 2" dialog box appears.

2 Insert the AIBO MIND 2 software "Memory Stick" media into the "Memory Stick" media reader/writer.

#### Caution

Make sure the AIBO MIND 2 software "Memory Stick" media safety switch is not in the "LOCK" position. If the switch is set to "LOCK", then the AIBO<sup>®</sup> Entertainment Robot's network settings and pictures will not be stored.

**3** Configure each setting to match your network environment, and click Write.

Configuration options will differ depending on whether your network is using a DHCP Server\*.

The DHCP server allows an IP address to be automatically allocated to a device on the network.

\* For details on DHCP server functionality, refer to the instruction manuals included with your modem or access point.

## Use the following procedure to confirm whether or not you are using a DHCP server in your network environment

(This procedure is for the Windows® XP operating system only. If using another operating system, consult its Help.)

- ① Click "Start" → "Control Panel".
- ② Click "Network and Internet Connections" → "Network Connections".
- 3 Right-click either "Wireless Network Connection" or "Local Area Connection", and select "Properties".
- ④ On the "General" tab, select "Internet Protocol (TCP/IP)" under "This connection uses the following items". Click "Properties".
- **⑤** Confirm your settings.

### If "Obtain an IP address automatically" is selected

The DHCP server function is in use.

Proceed to page 12.

### If "Use the following IP address" is selected

You are not using a DHCP server.

Proceed to page 13.

→ In this case, use the following steps to manually assign your AIBO<sup>®</sup> Entertainment Robot an IP address. Make a note of your PC's IP address displayed under "Use the following IP address". Choose an IP address for your AIBO robot that does not conflict with this.

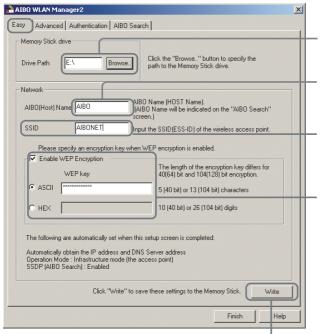
E.g. Your PC's IP address: 192.168.0.10

→ Your AIBO robot's IP address: 192.168.0.11, etc. (anything other than 192.168.0.10)

### When using a DHCP server in your network environment

Configure settings on the "Easy" tab.

When using a DHCP server, changes to the "Advanced" tab (page 13) are unnecessary.



- Click the "Browse" button, and specify the drive where the AIBO MIND 2 software "Memory Stick™" media is set (e.g. "S:" drive).
- ② The name that you enter here will appear as the "AIBO Name" on the "AIBO Search" tab (page 14). This name can be up to 8 alphanumeric characters and must contain at least one letter.
- 3 Enter the network name (SSID) used by the wireless LAN access point. (Maximum of 32 characters. Only alphanumeric characters and symbols are allowed.)
- Configure if using WEP (page 61). (If not using WEP, no settings are necessary.) If using WEP, select the "Enable WEP Encryption" check box, and enter the passkey (WEP)\* for the wireless LAN access point. (Passkeys must consist of alphanumeric characters or symbols. For [ASCII], the passkey must be 5 or 13 characters. For [HEX], it must be 10 or 26 characters.)

#### **Example Configuration**

|                  | Alphanumeric  | Hexadecimal                 |
|------------------|---------------|-----------------------------|
| WEP64 (40 bit)   | AIBO2         | 4149424f32                  |
| WEP128 (104 bit) | ENTERTAINMENT | 454e5445525441494e74d454e54 |

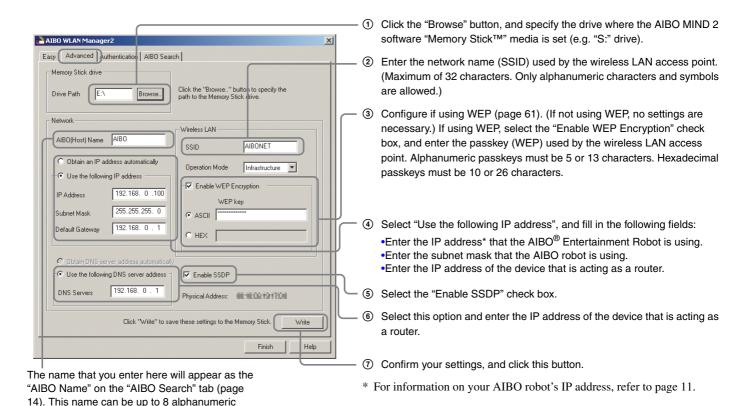
- (5) Confirm your settings, and click this button.
  - \* To insure security, the encrypted passkey (WEP) is displayed with 13 asterisks (\*) for ASCII and 26 for HEX, regardless of the number of characters entered.

## When not using a DHCP server in your network environment

Configure settings in the "Advanced" tab.

characters and must contain at least one letter.

When not using a DHCP server, changes to the "Easy" tab (page 12) are unnecessary.

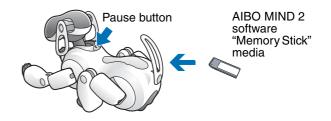


## Ϋ́Hint

For additional settings, refer to "AIBO Entertainment Robot network settings" on page 58.

4 Remove the AIBO MIND 2 software "Memory Stick<sup>TM</sup>" media from the reader/writer. Insert it into the AIBO Entertainment Robot, and press the pause button on the AIBO robot's back to activate the AIBO robot.

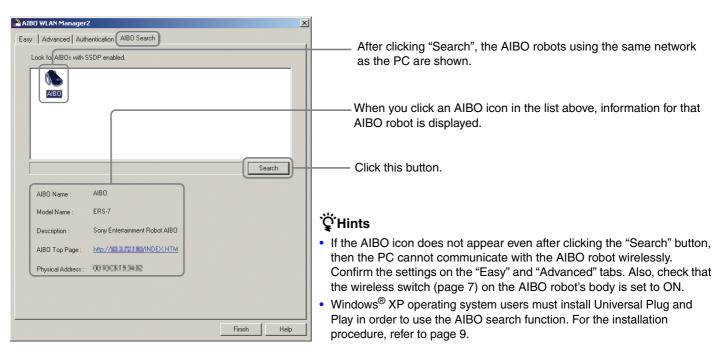
For instructions on inserting the "Memory Stick" media, refer to the "User's Guide (Basic)" for the AIBO robot ERS-7.



## **5** Once your AIBO robot is activated, go to the "AIBO Search" tab in the "AIBO WLAN Manager 2" dialog box, and click Search.

An icon appears if the AIBO robot is on the same network as your PC.

An icon will appear only if the "Enable SSDP" check box is selected.

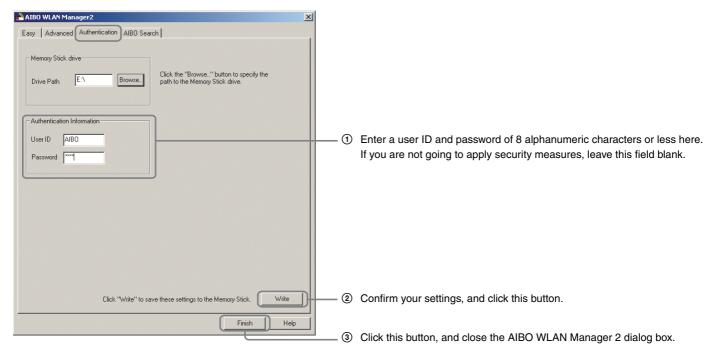


## 6 Click Finish to close the "AIBO WLAN Manager 2" dialog box.

You've completed this process! You can now communicate with your AIBO® Entertainment Robot wirelessly!

### Making the AIBO robot inaccessible from other computers

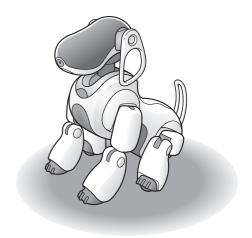
To prevent other people from accessing your AIBO robot, you can apply security measures with AIBO WLAN Manager 2. By setting a user ID and password here, every time your AIBO Photo Album and AIBO EYES feature pages are accessed from a Web browser, a screen will appear to request your user ID and password.



The user ID and password set here will also be needed to configure the settings for AIBO Entertainment Player. For details, see the "User's Guide (AIBO Entertainment Player)" for the AIBO robot ERS-7 (PDF).

## **AIBO Photo Album**

You can use your Web browser to view pictures taken by the  $\mathsf{AIBO}^{\textcircled{\$}}$  Entertainment Robot.



## Viewing pictures with the AIBO Photo Album

Pictures taken by the AIBO® Entertainment Robot are stored on its "Memory Stick<sup>TM</sup>" media.

Pictures taken by the AIBO robot are classified in the AIBO Photo Album as:

- Pictures taken by voice commands, AIBO card and AIBO MAIL
- Pictures and Sounds recorded during House Sitting mode
- Friendly faces
- Favorite things
- Favorite place

Here you will learn how to view pictures over a wireless LAN. For instructions on using a "Memory Stick" media reader/writer to view pictures stored on the AIBO MIND 2 software "Memory Stick" media, refer to page 49.

## **1** Start your PC's Web browser, and access the following address:

http://XXX.XXX.XXX.XXX

AIBO robot IP address

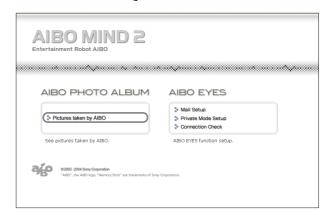
Alternatively, you can double-click the AIBO robot icon on the "AIBO Search" tab (page 14) of the "AIBO WLAN Manager 2".

## Ϋ́Hint

For information on your AIBO robot's IP address, refer to page 11.

The AIBO MIND 2 software top page is displayed.

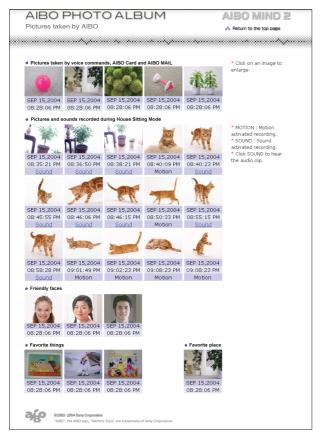
## **2** Click [Pictures taken by AIBO] under [AIBO PHOTO ALBUM].



A list of pictures stored on the "Memory Stick" media is displayed.

#### Note

If you have set a user ID and password with AIBO WLAN Manager 2, an input screen appears for your user ID and password.



- \* The images shown above are displayed in Web pages, so their resolutions differ from that of the actual pictures taken by the AIBO® Entertainment Robot.
- Pictures taken by voice commands, AIBO card, and AIBO MAIL (Max. 5)

This displays the photos taken by the AIBO robot when told to "*Take a picture*", shown the "Photo (B)" card, or sent an AIBO MAIL from a PC or mobile communication device.

## • Pictures and sounds recorded during House Sitting mode (Max. 15)

This displays the photos taken by the AIBO robot while in House Sitting mode. You can also listen to sounds the AIBO robot has recorded (page 19).

#### • Friendly faces (Max. 3)

This displays the photos registered by the AIBO robot of its owner's face.

#### • Favorite things (Max. 3)

This displays the photos registered by the AIBO robot of its favorite things.

#### • Favorite place (Max. 1)

This displays the photo taken by the AIBO robot of its favorite place.

Click on an image to display an enlarged version in a separate window. Picture resolution is  $416 \times 320$  pixels.

\* Please ensure that you are using Microsoft® Internet Explorer 6 or Netscape Navigator 7.

## Ψ̈́ Hints

- To view the most recent picture, reload the web page.
- Set the Web browser cache appropriately.
  - With Microsoft Internet Explorer 6:
     Click "Internet Options" in the "Tools" menu, open the "General" tab in the window that appears, and click "Settings" under "Temporary Internet files". Next, change the "Check for newer versions of the stored pages" setting to "Every visit to the page".
  - With Netscape Navigator 7:
     Click "Preferences" in the "Edit" menu, and from the categories that appear on the left side of the window click "Advanced" and then "Cache". Next, change the "Compare the page in the cache to the page on the network" setting to "Every time I view the page".

- Enable JavaScript and pop-up windows in your Web browser's settings.
- Pictures are saved in JPEG format in the "OPEN-R\APP\PC\PHOTO" folder on the "Memory Stick<sup>TM</sup>" media.

## Listening to sounds recorded by the AIBO<sup>®</sup> Entertainment Robot

Click "Sound" when it appears beneath a photo taken in House Sitting mode to hear the recorded sound.

# The AIBO EYES Feature

After setting up your e-mail, you can send the AIBO<sup>®</sup> Entertainment Robot e-mail (AIBO MAIL) to make it take pictures and enact and deliver messages.



## **Various AIBO EYES functions**

The AIBO® Entertainment Robot will take pictures and enact and deliver messages based on e-mail commands you send.

## Control the AIBO robot via the AIBO MAIL function (page 29)

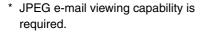
You can include commands for pictures and messages in an e-mail, and send it to the e-mail address that the AIBO robot checks.

The AIBO robot checks for e-mail periodically. Upon receiving an e-mail, the AIBO robot will execute the commands contained in the message.

## View pictures taken by the AIBO robot on your PC or mobile communication device\* (page 30)

The AIBO robot can take pictures on command, or at set intervals. You can also define the picture cues, and the angle of the AIBO robot's head.

The AIBO robot will e-mail the picture back to you\*.





## Send the AIBO robot a message (page 36)

You can send messages and songs for the AIBO robot to play back to family or friends nearby.

You can also prerecord these messages.

## The AIBO robot will alert you when it receives e-mail (page 39)

Upon receiving e-mail, the AIBO robot's wireless light will flash.

Regardless of whether the AIBO robot is on the Energy Station, it periodically checks for new e-mail, takes pictures and delivers messages according to the e-mail commands, and lets you know when a new message has arrived. When the AIBO robot is not on the Energy Station, it will take pictures from a laying-down position at the place where it received the AIBO MAIL. Placing the AIBO robot on its Energy Station is helpful when taking pictures of a fixed point at regular intervals.

## Have the AIBO robot forward pictures taken in House Sitting mode (page 39)

You can set the AIBO robot to take a picture and notify you by e-mail when it detects movements, faces, and sounds in House Sitting mode.

## Communicate with your AIBO® Entertainment Robot without your PC

The AIBO robot is always connected to the Internet via wireless LAN (provided that your environment has a continuous Internet connection). This means that the AIBO robot can always send and receive e-mail, even if your PC is turned OFF.

### Protection of privacy-

With the AIBO EYES feature, multiple users can send photo command e-mail to the AIBO robot, and view the pictures taken by it. To protect your privacy, the AIBO robot has a Private mode.

- User restrictions
   The AIBO EYES feature is available to a maximum of five preregistered users.
- User name notification In Private mode: The AIBO robot uses a Voice Signature (page 38) to announce the name of the user that sent the photo or message commands.

## Configuring e-mail

Once the network settings are completed, it is time to configure the e-mail address that the AIBO® Entertainment Robot will check, and then setup the AIBO EYES feature users.

When using the AIBO EYES feature in Private mode (page 26), a maximum of five users can be registered to send/receive e-mail with the AIBO robot.

This setup is performed via a Web browser.

If using the Windows<sup>®</sup> XP operating system, click "Start" → "All Programs" → "AIBO WLAN Manager 2" → "AIBO WLAN Manager 2".

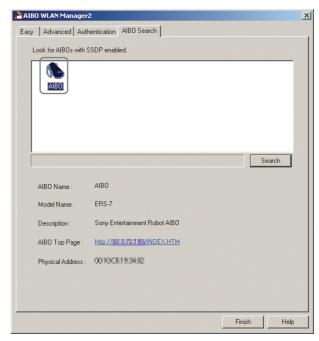
If using an operating system other than Windows XP, click "Start" → "Programs" → "AIBO WLAN Manager 2" → "AIBO WLAN Manager 2".

The "AIBO WLAN Manager 2" starts, and an "AIBO WLAN Manager 2" dialog box appears.

2 On the "AIBO Search" tab, click "Search".

An icon appears if the AIBO robot is in the same network as the PC.

**3** Double-click the particular AIBO robot whose e-mail you wish to configure.



The AIBO MIND 2 software top page appears.

## Ϋ́Hint

You can also display the AIBO MIND 2 software top page by starting your Web browser, and access the following address:  $\frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}$ 

http://XXX.XXX.XXX.XXX

AIBO robot IP address

For information on your AIBO robot's IP address, refer to page 11.

## 4 Click "Mail Setup" under "AIBO EYES".

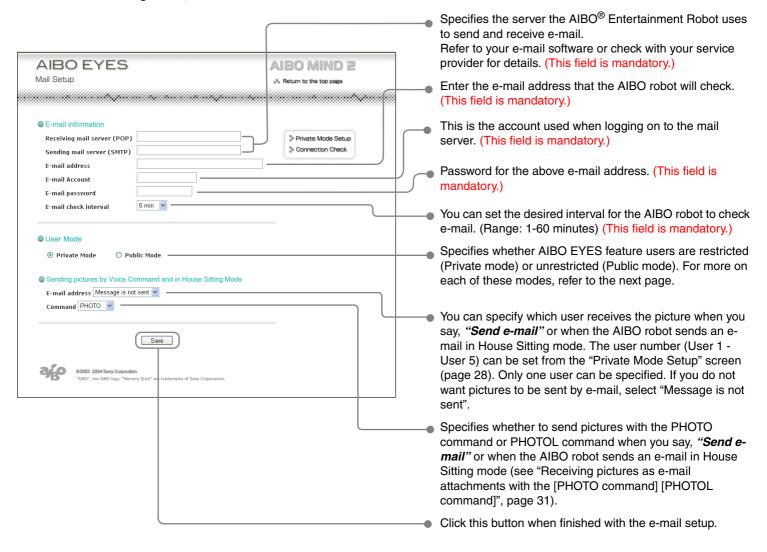


The "Mail Setup" screen appears.

### Note

If you have set a user ID and password with AIBO WLAN Manager 2, an input screen appears for your user ID and password.

## **5** Fill each setup field, and click the "Save" button.



#### Private mode

The AIBO EYES feature can be set to limit access only to registered users (maximum of five).

Those who wish to enjoy the AIBO EYES feature of photo commands and picture viewing, but want to limit access to family and close friends, should select this mode.

In addition to user limits, the Private mode includes a Voice Signature function; before taking a picture or playing a message, the AIBO® Entertainment Robot will identify the user who sent the command.

You can also record a unique Voice Signature for each user (page 38).

When the AIBO robot receives e-mail from an unregistered user, it will send an error notification e-mail to the address that the AIBO robot checks to retrieve e-mail (page 50).



#### Public mode

The AIBO EYES feature does not restrict usage to the five registered users in this mode. This is convenient when using the AIBO robot in public spaces, as it enables multiple users have the AIBO robot take various pictures. In Public mode, the Voice Signature function is not available.

Once you click the "Save" button, the AIBO® Entertainment Robot will check for new e-mail.

After a moment, the wireless light will turn ON to indicate the transmission status between the AIBO robot and the e-mail server.

If the e-mail check is completed successfully:

→ The wireless light will turn blue.

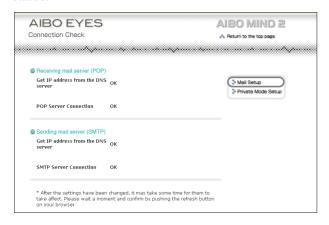
If there is new e-mail:

→ The wireless light will flash blue.

If attempts to connect to the mail server failed, the wireless light will turn OFF.

### If the wireless light turns OFF:

Click "Connection Check" in the "Mail Setup" screen, and check the current connection status.



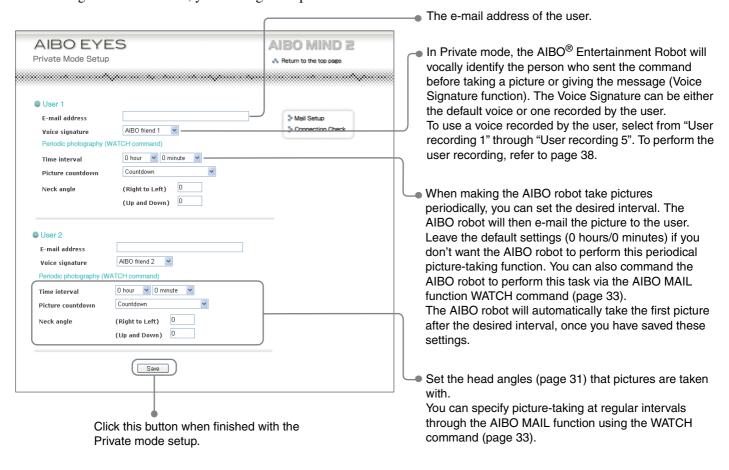


**6** If you are using AIBO EYES feature in Private mode, click on the "Private Mode Setup".

The "Private Mode Setup" screen appears.

## 7 Fill each Private mode setup field, and click the "Save" button.

When using the Private mode, you can register up to five users.



This completes the setup procedure.

## **AIBO MAIL**

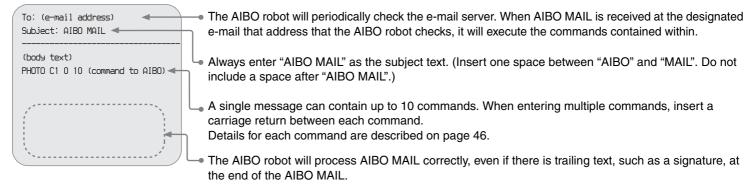
Let's try sending the AIBO<sup>®</sup> Entertainment Robot an e-mail with commands to take a picture or leave a message. The AIBO robot will take pictures, play back delivered messages, leave messages, and announce new e-mail according to your e-mail commands.

E-mail that contains commands for the AIBO robot to follow (e.g. take pictures or messages) is called an AIBO MAIL.

## **Writing AIBO MAIL**

AIBO MAIL must be written according to specific rules:

- All characters must be alphanumeric. The AIBO MAIL is not case sensitive.
- Use plain text (no encoding, no HTML) when composing AIBO MAIL.
- A single e-mail must be less than 10 KB (10,000 alphanumeric characters in total, including the header).



## **Checking for e-mail**

- With the AIBO EYES feature, the AIBO robot can check up to 199 messages on the e-mail server. Please manage your e-mail on the server, so that the number of messages does not exceed 199.
- The AIBO robot will not perform AIBO MAIL commands if that e-mail has already been opened and deleted from the server) via a PC or mobile communication device.\*
  - \* JPEG e-mail viewing capability is required.

## Viewing pictures taken by the AIBO<sup>®</sup> Entertainment Robot on your PC or mobile communication device\*

You can send picture commands with the AIBO MAIL function from your PC or mobile communication device\*. The AIBO robot will perform the command written in the e-mail, take the picture, and send it back to you. You can view pictures that the AIBO robot took using a Web browser (refer to page 17).

#### **Voice Signature function**

In Private mode, the AIBO robot will play the Voice Signature of the user who is sending the command (e.g. "It's Dad"), before taking the picture.

Refer to page 28 for Voice Signature setup. Page 38 contains instructions for recording custom Voice Signatures.

#### Caution

- If the number of pictures on the "Memory Stick<sup>TM</sup>" media exceeds the total available, each time you take a new picture the oldest picture will be deleted.
- Sony is not responsible for any rights-infringement disputes and other issues that may arise between you and another person or entity, resulting from pictures taken with the AIBO robot. Do not take any pictures that may infringe on another person's or entity's rights.

#### About the pictures that the AIBO robot sends

- The pictures are e-mailed as JPEG files, and simultaneously stored on the AIBO MIND 2 software "Memory Stick" media.
- Picture resolution is 208 × 160 pixels (standard resolution) or 416 × 320 pixels (high resolution).
- Depending on lighting conditions at the time the picture is taken, flicker (horizontal stripes) or reddish or bluish bands may appear in pictures.
- Fast movements may result in distortion of the picture the AIBO robot takes.

## The AIBO robot's posture when taking pictures

The AIBO robot can take pictures in both Station mode and Autonomous mode.

#### Station mode



Since the AIBO robot can remain in a fixed position, it can periodically take pictures of a certain point at specified intervals.

#### Autonomous mode

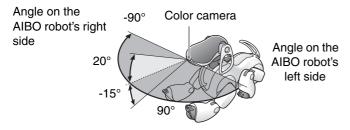


The AIBO robot will take pictures from a lying-down position from where it is when it receives the AIBO MAIL command.

<sup>\*</sup> JPEG e-mail viewing capability is required.

## The AIBO® Entertainment Robot's head angle (angle of the AIBO robot's color camera)

You can use commands in the AIBO MAIL to set the vertical and horizontal positioning of the AIBO robot's head (color camera) when having it take a picture.



You cannot change the AIBO robot's head angle when using a voice command to take a picture. The AIBO robot will look straight ahead and take the picture.

## Taking pictures on command

You can tell the AIBO robot to take a picture using the AIBO MAIL command. Upon receiving this e-mail, the AIBO robot will take a single picture.

### Note

The AIBO robot will check the e-mail server for e-mail at the desired interval that you initially set (page 25). When it acknowledges receipt of an AIBO MAIL with a photo command, it will take a picture.

The command that you use in your AIBO MAIL body text for the AIBO robot to take a picture and e-mail it back as a JPEG attachment is: **PHOTO, PHOTOL\*.** 

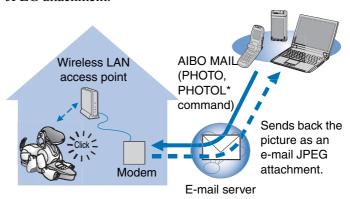
\* Because of the large size of images taken with PHOTOL, it is best used when sending images from a computer.

#### Note

For instructions on viewing the pictures taken by the AIBO robot with your Web browser, refer to page 17.

## Receiving pictures as e-mail attachments with the [PHOTO command] [PHOTOL command]

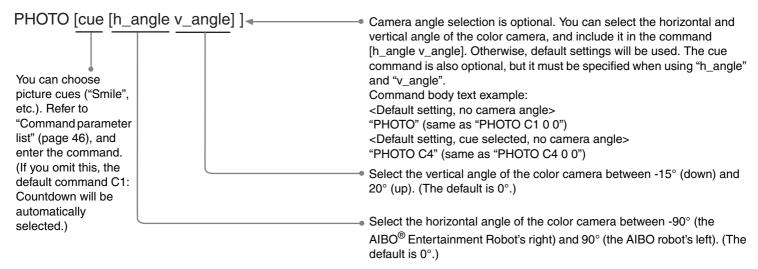
The AIBO robot will e-mail back the picture it took as a JPEG attachment.



\* PHOTO: Sends a picture in standard resolution ( $208 \times 160$  pixels).

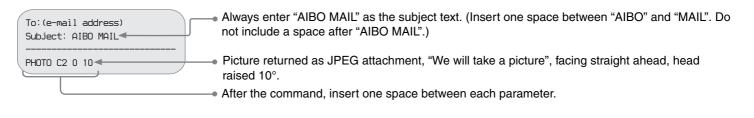
PHOTOL: Sends a picture in high resolution  $(416 \times 320 \text{ pixels})$ .

#### **Writing commands**



## AIBO MAIL example of a PHOTO command

All characters must be alphanumeric. AIBO MAIL is not case sensitive.



#### Note

For PHOTOL, write "PHOTOL" in place of "PHOTO" as the command.

## Directly commanding the AIBO<sup>®</sup> Entertainment Robot to take a picture – by voice command or by showing the appropriate AIBO card

You can have the AIBO robot take a picture by giving it a voice command or showing it the appropriate AIBO card. For example, you can have the AIBO robot take a picture of your child and send it to your mother's PC or mobile communication device.\*

\* JPEG e-mail viewing capability is required.

Say "Take a picture" to the AIBO robot. Or, show the AIBO robot the "Photo (B)" card.

## **2** Touch the head sensor. Or say, "Snap Shot".

The AIBO robot starts to count down and takes a picture when the shutter clicks.

You cannot specify the AIBO robot's head angle when using a voice command to take a picture.

## 3 Say "Send e-mail" to the AIBO robot.

The AIBO robot will send the picture to the registered user specified in the "Sending pictures by Voice Command and in House Sitting Mode" (page 25) field of the "Mail Setup" screen.

Regardless of the method used to initiate the photo command (whether it is AIBO MAIL or voice command), the last picture taken by the AIBO robot will be sent to the registered user specified in "Mail Setup".

# Taking periodic pictures at a set interval with the [WATCH command]

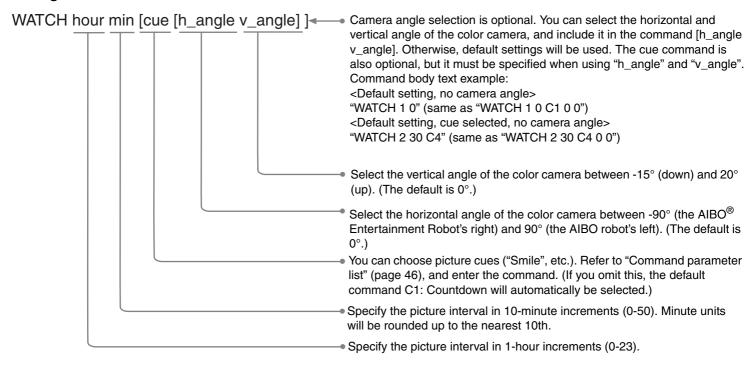
The AIBO robot can take periodic pictures at a specified interval, and e-mail them back as JPEG attachments. Set the interval in 10-minute increments, starting at a minimum of 10 minutes. (Minute units will be rounded up to the nearest 10th. For example, 15 minutes will be rounded up to 20 minutes.) The maximum you can set is 50 minutes.

#### **Caution**

If the AIBO robot is in the middle of checking the e-mail server or is in motion, there may be a slight delay in the timing of the scheduled picture taking.

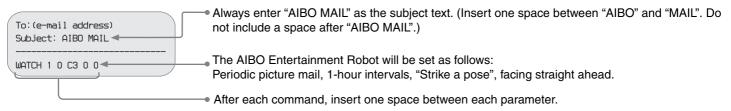
Periodic picture commands can be given through either the user settings (configured with your Web browser; see page 28), or included in the AIBO MAIL command.

#### Writing commands



#### AIBO MAIL example of a WATCH command

All characters must be alphanumeric. AIBO MAIL is not case sensitive.



### **Canceling the periodic pictures taking function**

Send the AIBO® Entertainment Robot a WATCH command with the interval set to: [hour: 0] [min: 0].

(See page 33 for how to write a WATCH command.)



Always enter "AIBO MAIL" as the subject text. (Insert one space between "AIBO" and "MAIL". Do not include a space after "AIBO MAIL".)

# Viewing pictures stored on the AIBO MIND 2 software "Memory Stick™" media

Pictures taken by the AIBO robot are stored on the AIBO MIND 2 software "Memory Stick" media.

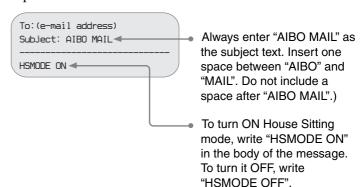
You can view these pictures using either of the following methods.

- View them with a Web browser (AIBO Photo Album)
  - → page 17
- Use a "Memory Stick" media reader/writer to view the pictures
  - **→** page 49

# Turning House Sitting Mode ON and OFF with the [HSMODE command]

When the AIBO robot is on the Energy Station, you can have it enter or exit House Sitting mode by sending it an AIBO MAIL command. If the AIBO robot is not on the Energy Station it will not carry out instructions from an AIBO MAIL command.

Input the AIBO MAIL command as follows:



## Sending the AIBO® Entertainment Robot a message or song

Using e-mail from your PC or mobile communication device\*, you can send the AIBO robot messages or songs to play back or perform.

\* JPEG e-mail viewing capability is required.

You can select from previously recorded messages or record your unique messages for the AIBO robot to play.

You can record up to five unique personal messages and save them as files. You can then command the AIBO robot to play these back by selecting the particular file and including it in your AIBO MAIL command body text.

For recording instructions, refer to page 38.

You can choose from two different AIBO MAIL commands to play messages or songs:

- Have the AIBO robot play back the message or song upon the recipient's request at a later time.
  - **→** MSG
- Have the AIBO robot play back the message immediately.
  - **→** PLAY

# Having the recipient play back the AIBO robot's message and/or song [MSG command].

This command can be used when the recipient is not near the AIBO robot.

#### Caution

You can send up to 100 messages and songs to the AIBO robot. When unplayed messages exceed 100, an error e-mail is sent to the AIBO MAIL (message command) sender (page 50).

## Message sender

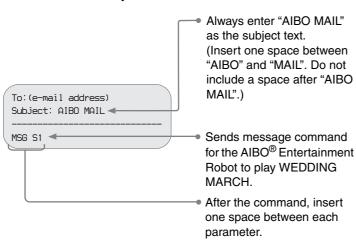
Specify a message or song to be sent by AIBO MAIL

### **Writing commands**

MSG msg

Specify the message or song you wish the AIBO robot to play. Refer to "Command parameter list" (page 46) and enter the code for either the SONG or WORD (message) commands.

#### AIBO MAIL example of a MSG command



## When the AIBO robot has receives a message command

#### Say "Check messages" to the AIBO robot.

If there is a message, the AIBO robot will play it back.

| Replaying a message                                                  | Touch the middle back sensor on the AIBO robot*. |
|----------------------------------------------------------------------|--------------------------------------------------|
| Playing the next<br>message<br>(The last message<br>will be erased.) | Touch the front back sensor on the AIBO robot*.  |
| Canceling playback                                                   | Touch the rear back sensor on the AIBO robot.    |

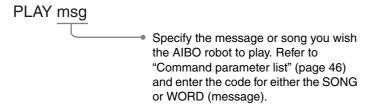
<sup>\*</sup> If you don't touch the AIBO robot's back sensors within 10 seconds after the previous message is played, message playback will be cancelled.

### Having the AIBO<sup>®</sup> Entertainment Robot play back the message or song immediately [PLAY command]

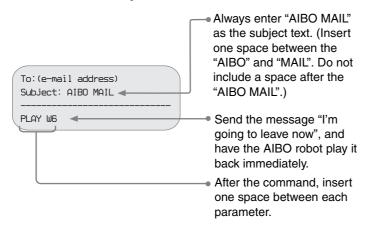
This command can be used when the message recipient is near the AIBO robot.

Specify a message or song and send it to the AIBO robot using the AIBO MAIL function.

#### **Writing commands**



#### AIBO MAIL example of a PLAY command



Immediately\* after receiving the AIBO MAIL, the AIBO robot will play the message.

\* Depending on the AIBO robot's condition, the message might not play, or its playback might be delayed.

### Recording unique messages/ recording Voice Signatures

You can prerecord both messages for the AIBO robot to deliver, and Voice Signatures (page 28) to identify people that leave messages or tell the AIBO robot to take pictures.

Simultaneously touch the front and rear back sensors for 3 seconds.

The voice guide begins.

Follow the AIBO robot's voice guide to record your message.

2 Next, follow the AIBO robot's voice guide to record the message.

## The AIBO® Entertainment Robot will notify you of new e-mail

If a new e-mail arrives at the e-mail address that the AIBO robot checks, its wireless light will flash blue and notify you of this arrival. (Your PC does not need to be activated for this notification feature to work.) This notification is only for regular e-mail and not for AIBO MAIL arrivals.

The AIBO robot will periodically check for e-mail at the intervals you selected in the "E-mail check interval" in the "Mail Setup" screen (page 25) section for e-mail setup. When you tell the AIBO robot "Check e-mail", the



AIBO robot will announce the results and let you know by saying:

- "You have new mail." (1-9 messages\*)
- "Wow! You've got lots of mail." (More than 9 messages\*)
- "You don't have any new mail."
  - \* AIBO MAIL is not included in this count.

#### Note

You can confirm the AIBO robot's e-mail server connection by observing its wireless light:

 When the e-mail check is successfully completed, the wireless light will turn blue.

- When e-mail check is successfully completed and there is new e-mail, the wireless light will flash blue.
- When attempts to connect to the e-mail server fail, the wireless light will turn OFF.

## Having the AIBO robot forward pictures taken in House Sitting mode

In House Sitting mode, the AIBO robot takes a picture and notifies you by e-mail when it detects movements, faces, and sounds. The AIBO robot attaches the pictures it takes to the e-mail notification, but recorded sounds cannot be attached and sent.

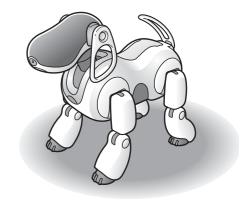
To have the AIBO robot attach and forward by e-mail the pictures it takes in House Sitting mode, turn the e-mail forwarding function "ON" in the Settings for House Sitting mode on the AIBO robot, and specify a destination e-mail address under "Sending pictures by Voice Command and in House Sitting Mode" on the "Mail Setup" screen (page 25). For details on the AIBO robot's House Sitting mode, refer to the "User's Guide (Basic)" for the AIBO robot ERS-7.

#### Caution

If an object in front of the AIBO robot is continuously moving or making sounds, the AIBO robot will repeatedly send you pictures of it, resulting in an extremely large volume of e-mail arriving in your inbox. Because phone charges may become a burden in this situation, please be careful when specifying a mobile phone e-mail address as the destination address.

# Additional Information

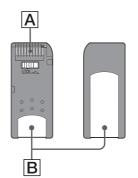
This section provides notes on usage and a troubleshooting guide.



#### Notes on use

To protect the data stored on the AIBO MIND 2 software "Memory Stick<sup>TM</sup>" media, note the following:

- The AIBO MIND 2 software "Memory Stick" media is designed exclusively for use with the AIBO<sup>®</sup> Entertainment Robot ERS-7. It is not compatible with any other AIBO robot models.
- Do not use the AIBO MIND 2 software "Memory Stick" media to save data from PCs or camcorders, or for any other purpose than using the AIBO Entertainment Robot ERS-7. Doing so may result in damage to the AIBO robot.
- Only Sony brand "Memory Stick" media reader/writers are guaranteed to operate correctly.
- Do not touch terminal A with your bare hands or metal objects.
- If the "Memory Stick" is used in a location subject to static electricity or electric noise, data may be lost or corrupted.
- Do not affix anything other than the "Memory Stick" media label on the areas indicated by B. A sticker has already been attached to the AIBO MIND 2 software "Memory Stick" media at the factory.

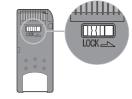


- Do not bend, drop, or apply strong shock to the "Memory Stick" media.
- Do not attempt to disassemble or modify the "Memory Stick" media.
- To remove the "Memory Stick" media from the AIBO robot while it is still operating, first press the pause button to stop the AIBO robot's movements and refer to the "User's Guide (Basic)" for the AIBO Entertainment Robot ERS-7.
- Keep the "Memory Stick" media away from water and other liquids.

- Do not use or store the "Memory Stick" media in places subject to:
  - Excessively high temperatures, such as in a car parked in the sun.
  - Direct sunlight.
  - High humidity or corrosive gas.
- When carrying or storing the "Memory Stick" media, keep it in the supplied case.
- The contents of the AIBO MIND 2 software "Memory Stick" media cannot be copied to another "Memory Stick" media. Doing so contravenes with the clauses of the End-User License Agreement and may void your authority to use this product.
- Sony<sup>®</sup> assumes no responsibility for any malfunctions that may occur as a result of using the AIBO Entertainment Robot ERS-7 in a way not specified in this manual and will void the product's limited warranty or any extended warranty.
- The specifications of the AIBO MIND 2 software are subject to change without notice.

#### Caution

- Do not set the safety switch of the "Memory Stick" media to "LOCK".
   Doing so will make it impossible for the AIBO robot to store pictures.
- If the safety switch on the "Memory Stick" media is set to "LOCK", the AIBO robot's face lights will turn red to warn you while the AIBO robot is



starting. Press the pause button once more to place the AIBO robot in Pause mode, and then unlock the safety switch on the "Memory Stick" media. When the AIBO robot starts normally, the face lights turn white.

## **Troubleshooting**

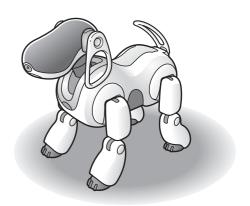
If you experience any difficulties, use this troubleshooting guide to check for the possible causes of the problem before contacting the AIBO Customer Link (for customer support). You can also refer to the "Troubleshooting" section in the "User's Guide (Basic)" for the AIBO robot ERS-7. Should the problem persist, contact the AIBO Customer Link (for customer support). (See the last page of this guide for details about the AIBO Customer Link (for customer support).)

| Symptom                                                                               | Remedy                                                                                                                                                                                      |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I can't connect to the AIBO® Entertainment                                            | Network settings are incorrect.                                                                                                                                                             |
| Robot from my PC.                                                                     | → Check your network settings (page 8).                                                                                                                                                     |
| The AIBO WLAN Manager 2 cannot find the AIBO robot.                                   | <ul> <li>Under the Windows<sup>®</sup> XP operating system, Universal Plug and Play is not installed.</li> <li>→ Install Universal Plug and Play (page 9).</li> </ul>                       |
|                                                                                       | • If you have installed Universal Plug and Play under he Windows Me operating system, you will need to use Windows Update to update your Windows Me operating system to the latest version. |
|                                                                                       | → Click "Start" → "Windows Update", and follow the on-screen instructions to<br>update Windows Me.                                                                                          |
| Data transmission is slow.                                                            | • The AIBO robot is conflicting with an access point or another wireless LAN device.                                                                                                        |
|                                                                                       | → Try changing the wireless channel on the access point.                                                                                                                                    |
|                                                                                       | <ul> <li>Many devices may be accessing the same access point at once.</li> </ul>                                                                                                            |
|                                                                                       | → Try waiting a while before attempting to access again.                                                                                                                                    |
|                                                                                       | • The AIBO robot or wireless LAN PC is too far away from the access point.                                                                                                                  |
|                                                                                       | → The signal range can vary according to the installation location and the surrounding environment.                                                                                         |
|                                                                                       | Relocate the AIBO robot and the wireless LAN-ready PC closer to the access point.                                                                                                           |
| The AIBO robot can't connect to the e-mail server, and the wireless light is not lit. | • Make sure "E-mail Information" is properly set in the "Mail Setup" screen (page 25).                                                                                                      |
| server, and the whereas fight is not lit.                                             | <ul> <li>Make sure your network is configured correctly.</li> </ul>                                                                                                                         |

| Symptom                                                                                                                                                                 | Remedy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| After telling AIBO <sup>®</sup> Entertainment Robot "Send e-mail", the AIBO robot says "I've finished sending the e-mail", but the e-mail fails to reach the recipient. | <ul> <li>The recipient's e-mail address setting may be incorrect.</li> <li>→ Make sure the recipient's e-mail address is set correctly in the "Mail Setup" screen (page 25). In the "Sending pictures by Voice Command and in House Sitting Mode" section, make sure the "E-mail address" is not set to another user or to "Message is not sent".</li> </ul>                                                                                                                                                                                                                                                                                                            |
| The AIBO robot isn't notifying you of the arrival of new e-mail.                                                                                                        | <ul> <li>The e-mail check interval may be too long.</li> <li>→ In the "Mail Setup" screen (page 25), try setting the "E-mail check interval" under "E-mail Information" to a shorter length.</li> <li>The number of messages on the mail server may have exceeded 199.</li> <li>→ With the AIBO EYES feature, up to 199 messages can be checked on the server by the AIBO robot. Please manage your e-mail on the server so that the number of e-mail does not exceed 199.</li> <li>→ If the AIBO MAIL is read from a PC (and left on the server) before AIBO has checked for that e-mail, then AIBO will not execute the commands contained in that e-mail.</li> </ul> |
| The sound is interrupted while the AIBO robot is playing a message or song.                                                                                             | • If the network is overloaded, the audio may be interrupted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

## **Appendix**

- Words that the AIBO<sup>®</sup> Entertainment Robot can understand (AIBO EYES feature)
- Command parameter list (for AIBO MAIL commands)
- AIBO Entertainment Robot ERS-7 light
- Viewing pictures taken by the AIBO Entertainment Robot with a "Memory Stick™" media reader/writer
- Error e-mail examples
- Editing "WLANCONF.TXT" manually
- AIBO Entertainment Robot network settings
- Glossary



## Words that the AIBO<sup>®</sup> Entertainment Robot can understand (AIBO EYES feature)

Below are some words (voice commands) that the AIBO robot can understand when using the AIBO EYES feature. For a complete list of words that AIBO can understand in Autonomous mode, and other various situations, refer to the "User's Guide (Basic)" for the AIBO robot ERS-7.

In the following cases, the AIBO robot may not understand what you say.

- While the AIBO robot is emitting sounds or is in motion, it may not be able to hear you easily.
- The AIBO robot may not recognize several words depending on its mode or condition.
- The AIBO robot may not hear you if its surroundings are noisy. Try to speak to the AIBO robot in a quiet environment.
- When the pronunciation of a word is unclear. Try to pronounce each word clearly.

#### Pictures

#### Take a picture.

The AIBO robot can take a picture with its color camera. (page 33).

#### Snap Shot.

If you speak to the AIBO robot while it is preparing to take a picture (while waiting for you to touch its head sensor), it will start counting down to take the picture (page 33).

#### Pictures

#### Send e-mail.

The AIBO robot sends the most recent picture to the specified user (page 33).

#### Message playback

#### Check messages.

The AIBO robot plays a message or a song (page 37).

#### Mail notification

#### Check e-mail.

The AIBO robot will tell you if there was new e-mail for you the last time it checked.



## **Command parameter list (for AIBO MAIL commands)**

The following is a list of codes that can be used as command parameters for the AIBO MAIL function.

- All codes must be entered in plain text. Codes are not case sensitive.
- Include "Code" values from these tables in your AIBO MAIL. For SONGS and WORDS, you can choose from either "Code 1" or "Code 2" values and the results will be the same.

## PHOTO, PHOTOL, WATCH command parameters

#### **Cue (when taking pictures)**

| Code |                             |
|------|-----------------------------|
| C1   | Countdown (default setting) |
| C2   | We will now take a picture  |
| C3   | Strike a pose               |
| C4   | Smile                       |
| C5   | Show me some teeth!         |
| C6   | Show me your pearly whites! |

#### MSG, PLAY command parameters

#### **SONG**

| Code 1     | Code 2     | Title               |
|------------|------------|---------------------|
| <b>S</b> 1 | S.WEDDING  | WEDDING MARCH       |
| S2         | S.BACH     | AIR ON A G-STRING   |
| S3         | S.GRACE    | AMAZING GRACE       |
| S4         | S.OLDCLOCK | GRANDFATHER'S CLOCK |
| S5         | S.CUSTOM1  | default *1          |
| S6         | S.CUSTOM2  | default *1          |
| S7         | S.CUSTOM3  | default *1          |
| S8         | S.CUSTOM4  | default *1          |
| S9         | S.CUSTOM5  | default *1          |
| S10        | S.CUSTOM6  | default *1          |

<sup>\*1</sup> The contents of values S5-S10 can be provided via AIBO Custom Manager 2 (supplied separately). AIBO Custom Manager 2 is software that runs on a computer. For the latest information about AIBO Custom Manager 2 and available contents, visit our Web site at http://www.aibo.com. The AIBO® Entertainment Robot is shipped with S5-S10 set to "Wedding March".

#### WORD (voice message)

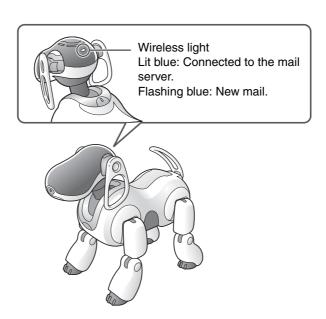
| Code 1 | Code 2    | Message                |
|--------|-----------|------------------------|
| W1     | W.USER1   | Recording 1 *2         |
| W2     | W.USER2   | Recording 2 *2         |
| W3     | W.USER3   | Recording 3 *2         |
| W4     | W.USER4   | Recording 4 *2         |
| W5     | W.USER5   | Recording 5 *2         |
| W6     | W.LEAVING | I'm going to leave now |
| W7     | W.NOTYET  | I can't leave yet      |
| W8     | W.LATE    | I'll be late           |

| Code 1 | Code 2     | Message                      |
|--------|------------|------------------------------|
| W9     | W.CALLME   | Call me                      |
| W10    | W.THANKS   | Thank you                    |
| W11    | W.SORRY    | I'm sorry                    |
| W12    | W.CONGRATS | Congratulations!             |
| W13    | W.HANGIN   | Hang in there                |
| W14    | W.ITSTIME  | It's time now, get a move on |
| W15    | W.LAUGH    | Ha, ha, ha                   |
| W16    | W.CUSTOM1  | It's AIBO! *3                |
| W17    | W.CUSTOM2  | It's AIBO! *3                |
| W18    | W.CUSTOM3  | It's AIBO! *3                |
| W19    | W.CUSTOM4  | It's AIBO! *3                |
| W20    | W.CUSTOM5  | It's AIBO! *3                |
| W21    | W.CUSTOM6  | It's AIBO! *3                |
| W22    | W.CUSTOM7  | It's AIBO! *3                |
| W23    | W.CUSTOM8  | It's AIBO! *3                |
| W24    | W.CUSTOM9  | It's AIBO! *3                |
| W25    | W.CUSTOM10 | It's AIBO! *3                |
| W26    | W.CUSTOM11 | It's AIBO! *3                |
| W27    | W.CUSTOM12 | It's AIBO! *3                |

<sup>\*2</sup> W1-W5 are recording files. For recording instructions, refer to page 38.

<sup>\*3</sup> The contents of values W16-W27 can be provided via AIBO Custom Manager 2 (supplied separately). AIBO Custom Manager 2 is software that runs on a computer. For the latest information about AIBO Custom Manager 2 and available contents, visit our Web site at http://www.aibo.com. The AIBO robot is shipped with W16-W27 set to "It's AIBO!".

## **AIBO**® Entertainment Robot ERS-7 light



## Viewing pictures taken by the AIBO<sup>®</sup> Entertainment Robot with a "Memory Stick™" media reader/writer

1 Remove the "Memory Stick" media from the AIBO robot.

For instructions on removing the "Memory Stick" media, refer to the "User's Guide (Basic)" for the AIBO robot ERS-7.

2 Insert the "Memory Stick" media into the "Memory Stick" media reader/writer.

For details, consult the user manual included with your "Memory Stick" media reader/writer.

**3** Click "INDEX.HTM" in the "OPEN-R" folder on the "Memory Stick" media.

The AIBO PHOTO ALBUM screen appears (page 17).

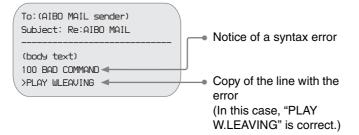
**4** Remove the "Memory Stick" media from your PC.

For details on removing the "Memory Stick" media, refer to the user documentation included with your PC devices.

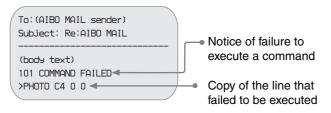
### **Error e-mail examples**

If the following problems occur while using the AIBO EYES feature, the AIBO<sup>®</sup> Entertainment Robot will send an error notification e-mail to either the AIBO MAIL sender or the e-mail address it is set to check periodically.

When there is a syntax error in the AIBO MAIL command

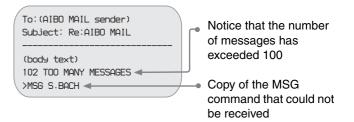


 When the AIBO robot cannot execute a command because it is being picked up or stuck

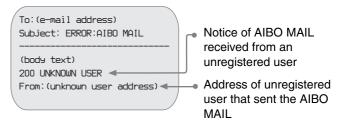


 When the number of (unplayed) messages left with the AIBO robot exceeds 100

You can send up to 100 messages and songs to the AIBO robot. Wait for the AIBO robot to play the messages it is holding, and then resend the AIBO MAIL (MSG command).



 When the AIBO robot receives AIBO MAIL from someone other than a registered user (Private mode only)



#### When the head angle cannot be maintained

When the head angle cannot be maintained and the AIBO® Entertainment Robot's head falls forward, an error notification is sent, and the AIBO robot is deactivated. Make sure the Energy Station is placed on a level surface, and that there is nothing wrong with the AIBO robot's neck joint section.



#### When the POP server does not support the UIDL command

AIBO EYES feature cannot be used with a POP server that does not support the UIDL command. If you receive the error notification e-mail below, check with your Internet service provider to see whether your POP server supports the UIDL command.



## **Editing "WLANCONF.TXT" manually**

Users of Windows<sup>®</sup> 98, Mac OS<sup>®</sup>, and other operating systems that do not support the "AIBO WLAN Manager 2" can use the following procedure to manually edit the contents of "WLANCONF.TXT" to configure the network. Users of the Windows 98 SE, Windows Me, Windows 2000, and Windows XP (Home Edition or Professional) operating systems can use the "AIBO WLAN Manager 2" (page 10).

- Insert the AIBO MIND 2 software "Memory Stick" media into the "Memory Stick" media reader/writer.
- Copy the wireless LAN configuration file "WLANCONF.TXT" from the sample folder into its parent folder.

Copy \OPEN-R\SYSTEM\CONF\SAMPLE\
WLANCONF.TXT into \OPEN-R\SYSTEM\CONF\.

## **3** Edit the copy of "WLANCONF.TXT" with a text editor.

The contents to edit will depend on whether your network setup uses a DHCP server\* or not.

The DHCP server allows an IP address to be automatically allocated to a device on the network.

\* For details on DHCP server functionality, refer to the instruction manuals included with your modem or access point.

#### When security measures are set

Use a text editor to create a file called "OWNER.TXT" and place it in \OPEN-R\APP\DATA\P (page 57).

## Use the following procedure to confirm whether or not you are using a DHCP server in your network environment

(This procedure is for the Windows® 98 SE operating system only. If using another operating system, consult its Help.)

- ① Click "Start" → "Settings" → "Control Panel".
- 2 Double-click "Network".
- ③ Click "TCP/IP" → "Network Card Name", and click the "Properties" button.

  If "TCP/IP" → "Network Card Name" is not shown, click the "Add" button. In the "Select Network Component Type" window that appears, click "Protocol", and click the "Add" button. Add the TCP/IP protocol.
- 4 Click the "IP Address" tab, and check the settings.

#### If "Obtain an IP address automatically" is selected

You are using a DHCP server.

Proceed to page 54.

#### If "Specify and IP address" is selected

You are not using a DHCP server.

Proceed to page 55.

→ In this case, use the following steps to manually assign an IP address to the AIBO<sup>®</sup> Entertainment Robot. Make a note of your PC's IP address displayed under "Use the following IP address". Choose an IP address for the AIBO robot that does not conflict with this.

E.g. Your PC's IP address: 192.168.0.10

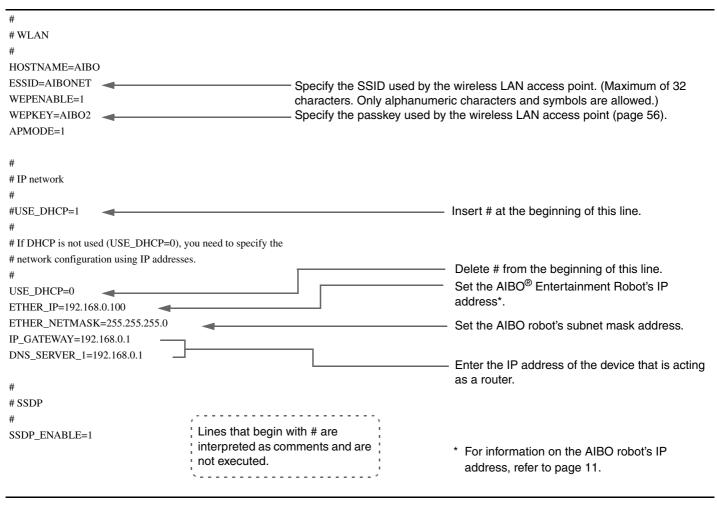
→ The AIBO robot's IP address: 192.168.0.11, etc. (anything other than 192.168.0.10)

#### When using a DHCP server in your network environment

```
# WLAN
HOSTNAME=AIBO
ESSID=AIBONET -
                                                   Specify the SSID used by the wireless LAN access point. (Maximum of 32
WEPENABLE=1
                                                   characters. Only alphanumeric characters and symbols are allowed.)
                                                   Specify the passkey used by the wireless LAN access point (page 56).
WEPKEY=AIBO2
APMODE=1
# IP network
USE_DHCP=1
# If DHCP is not used (USE_DHCP=0), you need to specify the
# network configuration using IP addresses.
#USE_DHCP=0
#ETHER_IP=192.168.0.100
                                                                             Lines that begin with # are
#ETHER_NETMASK=255.255.255.0
                                                                            interpreted as comments and are
#IP_GATEWAY=192.168.0.1
                                                                            not executed.
#DNS_SERVER_1=192.168.0.1
#SSDP
SSDP ENABLE=1
```

For details about each parameter, refer to "WLANCONF.TXT parameter list" (page 56).

#### When not using a DHCP server in your network environment



For details about each parameter, refer to "WLANCONF.TXT parameter list" (page 56).

## **WLANCONF.TXT** parameter list

This list explains each parameter in the wireless LAN configuration file.

| HOSTNAME      | Defines the name the AIBO <sup>®</sup> Entertainment Robot uses on the wireless network. This name can be up to 8 alphanumeric characters and must contain at least one letter.                                                                                                                                                                                                                                                                                                        |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ESSID         | The name of the wireless network. Up to 32 alphanumeric characters and symbols are allowed.                                                                                                                                                                                                                                                                                                                                                                                            |
| WEPENABLE     | Sets whether to use WEP (wireless encryption system). Set this value to 0 if disabled, and 1 if enabled.                                                                                                                                                                                                                                                                                                                                                                               |
| WEPKEY        | Sets the WEP key (wireless passkey). Alphanumeric passkeys must be 5 or 13 characters. Hexadecimal passkeys must be 10 or 26 characters (0-9, A-F, a-f). (Supports WEP64 (40 bit) and WEP128 (104 bit) If using WEP64, use 5 alphanumeric characters, or "0x" followed by 10 hexadecimal characters. If using WEP128, use 13 alphanumeric characters, or "0x" followed by 26 hexadecimal characters. Example: For WEP64 (40 bit) String: WEPKEY=AIBO2 Hexadecimal: WEPKEY=0x4149424f32 |
| APMODE        | Sets the wireless LAN mode for the AIBO robot. For AIBO EYES feature, set this value to 1 (connect in Infrastructure mode).                                                                                                                                                                                                                                                                                                                                                            |
| ETHER_IP      | Set the AIBO robot's IP address.  This parameter must be specified when the USE_DHCP value is set to 0.                                                                                                                                                                                                                                                                                                                                                                                |
| ETHER_NETMASK | Sets the IP subnet mask. This parameter must be specified when the USE_DHCP value is set to 0.                                                                                                                                                                                                                                                                                                                                                                                         |
| IP_GATEWAY    | Sets the gateway IP address. If a gateway is not present on the network, set this value to be the same as the ETHER_IP address.  This parameter must be specified when the USE_DHCP value is set to 0.                                                                                                                                                                                                                                                                                 |
| DNS_SERVER_1  | Sets the DNS server IP address. This parameter must be specified when the USE_DHCP value is set to 0.                                                                                                                                                                                                                                                                                                                                                                                  |
| USE_DHCP      | Defines whether to use DHCP (Dynamic Host Configuration Protocol) to automatically assign the AIBO robot an IP address. Set this value to 0 if disabled, and 1 if enabled.                                                                                                                                                                                                                                                                                                             |

| SSDP_ENABLE | Defines whether to use SSDP (Simple Service Discovery Protocol). In the "AIBO WLAN Manager 2", when you click the "Search" button on the "AIBO Search" tab, the AIBO <sup>®</sup> Entertainment Robot will show up as an icon. (If using the Windows <sup>®</sup> XP operating system, Universal Plug and Play must be enabled.)                                   |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             | You can access the AIBO MIND 2 software top page simply by double-clicking the AIBO icon. To use SSDP, launch the "AIBO WLAN Manager 2", and configure the network in the "Basic" tab, or select the "Enable SSDP" check box in the "Details" tab. If manually editing the WLANCONF.TXT file, set the value to 0 if not using SSDP, and set it to 1 if using SSDP. |

#### When security measures are set

The following parameters appear in the "OWNER.TXT" file, located in \OPEN-R\APP\DATA\P. (This example assumes a user ID and password of "AIBO".)

OWNER=AIBO OWNER\_PASSWORD=AIBO

#### Parameters in "OWNER.TXT"

| OWNER          | Specifies the user ID.       |
|----------------|------------------------------|
| OWNER_PASSWORD | Specifies the user password. |

## **AIBO**® Entertainment Robot network settings

This list describes the configuration values for the AIBO robot's internal wireless LAN function. Once the AIBO robot has communicated with the network devices, you can change these settings to suit your environment. For information on each parameter, refer to "Glossary" (page 59).

| Parameter      | Description                            |
|----------------|----------------------------------------|
| Hostname       | The name for the AIBO robot used       |
|                | over the wireless relay. Up to 8       |
|                | alphanumeric characters are allowed.   |
| IP Address     | IP address                             |
| Subnet Mask    | Subnet mask value                      |
| IP Gateway     | Gateway address                        |
| SSID           | Name of the wireless network. Up to    |
|                | 32 alphanumeric characters and         |
|                | symbols are allowed.                   |
| WEP key        | Keys used to encrypt wireless data     |
|                | must be 5 or 13 alphanumeric           |
|                | characters. Hexadecimal passkeys       |
|                | must be 10 or 26 characters (0-9, A-F, |
|                | a-f). Ignore this setting if not using |
|                | encryption.                            |
| Operation mode | Infrastructure mode                    |

## **Glossary**

#### **Access point**

A network device that contains both a wireless communication interface and an Ethernet interface, an access point acts as a bridge between wireless LAN and wired LAN.

To use an access point for wireless communication, you must specify an identifier called an SSID, a wireless communication channel, and a WEP key.

#### **DHCP (Dynamic Host Configuration Protocol)**

When building a TCP/IP network, IP addresses must be specified.

If a DHCP server is present on the network, then it can be used to automatically allocate IP addresses. DHCP server functionality is typically provided by a router.

#### **IEEE 802.11b**

The standard for wireless LAN that uses the 2.4 GHz frequency band. Transmission speeds of up to 11 Mbps have been achieved.

The AIBO® Entertainment Robot ERS-7 is based on IEEE 802.11b.

#### Infrastructure mode

Also called Access Point mode.

Communication mode used between an access point and a device with a wireless LAN card.

The wireless channel follows the channel defined by the access point. On the AIBO robot side, it is necessary to configure the SSID and WEP key to match the access point's settings.

#### IP address

In a TCP/IP network, numbers used to distinguish devices are called IP addresses. An IP address consists of 4 numbers from 0-255.

Example: 192.168.1.1 10.0.1.1

#### LAN (Local Area Network)

LAN usually refers to a relatively small-scale network, made up of Ethernet lines with transfer speeds of 10 Mbps - 100 Mbps. You can use an access point to connect a wireless LAN to a wired LAN.

#### Router

By connecting an external network (Internet) to a private network at home, a router allows one external network line to be shared by multiple network devices.

Router functionality can be found inside DSL modems, wireless LAN access points, and other network devices.

#### **SSDP (Simple Service Discovery Protocol)**

In a Universal Plug and Play environment, this is the protocol used to discover network devices.

If you enable SSDP on the AIBO® Entertainment Robot ERS-7, then you will be able to search the network for the AIBO robot ERS-7 using the "AIBO WLAN Manager 2".

#### **SSID**

Also referred to as "Access Point ID", "Group Name", and "ESSID".

When a wireless LAN-ready device performs wireless communication in Infrastructure mode, it uses a string called an SSID as its wireless network identifier.

The SSID on the AIBO robot should be set to the same SSID as on the access point.

The SSID can be a maximum of 32 characters. Only alphanumeric and punctuation characters are allowed.

#### Subnet mask

are set to '1'.

While an IP address is composed of 4 numbers ranging from 0-255 (see "IP Address"), in order to manage them more efficiently, IP addresses are split into network portions and host portions. This setting is called the subnet mask. A subnet mask defines the network portion as those bits that

Example: When a subnet mask of 255.255.255.0 is set for a device with an IP address of 192.168.1.1,

## TCP/IP (Transmission Control Protocol/Internet Protocol)

One type of communication method (protocol) used by network devices (such as PCs) to communicate. TCP/IP is the most widely used protocol on the Internet. This wireless LAN card communicates over TCP/IP. When communicating over TCP/IP, a number called an "IP Address" is needed to distinguish among devices.

#### **WEP (Wired Equivalent Privacy)**

When using wireless communication, WEP is used to encrypt data to prevent it from being analyzed by another party. To enable WEP, you must configure a wireless passkey called a WEP key.

The AIBO<sup>®</sup> Entertainment Robot ERS-7 supports both the WEP64 (40 bit) and the WEP128 (104 bit) encryption systems.

If using WEP64, use 5 alphanumeric characters, or "0x" followed by 10 hexadecimal characters.

If using WEP128, use 13 alphanumeric characters, or "0x" followed by 26 hexadecimal characters.

#### Wi-Fi (Wireless Fidelity)

Wi-Fi Alliance, the wireless LAN industry organization, prescribed this standard specification to ensure connectivity. Products that comply with this specification are allowed to use the "Wi-Fi (certified)" logo.

The wireless LAN module installed in the AIBO robot ERS-7 is certified by Wi-Fi, and supports connections with other Wi-Fi certified 2.4 GHz wireless LAN products (IEEE 802.11b compliant).



#### Wireless channel

Under IEEE 802.11b, the 2.4 GHz band is divided into 14 channels. Assigning different channels to different networks in proximity to one another avoids channel interference. The AIBO robot ERS-7 can use wireless channels 1-11. To configure the wireless channel under Infrastructure mode, set the channel value on the access point. The new setting will be automatically reflected in all of the network devices.

#### **Customer Support**

How can you contact the AIBO Customer Link (for customer support)?

In the U.S.A.:

Call 1-800-427-2988

E-mail address: aibosupport@info.sel.sony.com

In Europe:

English line: +44(0)-20-7365-2937 German line: +49(0)-69-9508-6309 French line: +33(0)-1-5569-5117